

**UNIT PLAN 2020 – 2021**

**NON SEMESTER**

**BIOLOGICAL SCIENCE – FIRST YEAR**

UNITS	TOPICS	NO.OF HOURS		
		L	T	P
I AIMS AND OBJECTIVES OF TEACHING BIOLOGICAL SCIENCE	1.1 Meaning, Nature and Scope 1.2 Aims and objectives of teaching Biological science in Schools 1.3 Need and significance of teaching Biological science 1.4 Values of teaching Biological Science	4	1	1
II PLANNING FOR INSTRUCTION	2.1 Steps in planning a lesson : Setting lesson goals 2.2 Designing a unit plan 2.3 Designing a lesson plan 2.4 Bloom’s Taxonomy of educational objectives 2.5 Formulating Instructional of objectives at cognitive, affective and psychomotor levels 2.6 Structure of a four-fold lesson plan 2.7 Preparation of a model lesson plan 2.8 Types of test –items 2.9 constructing test-items for formative evaluation in class	6	3	3
II PRACTISING THE TEACHING SKILLS IN BIOLOGICAL SCIENCE	3.1 Meaning of teaching 3.2 Teaching skills 3.3. Model Micro Lesson 3.4 Practising a mini-lesson with multiple teaching skills (for 20 minutes) 3.5 Practising a mini lesson (Motivation, presentation, interaction, reflection and summing up) 3.6 Observation and feedback on mini-teaching 3.7 Model Mini Lesson Plan 3.8 Practicing a mini-lesson-Integration of Teaching Skills 3.9 Observation and feedback on the practice of mini teaching – Integration of teaching skills 3.10 Observation and feedback on Practice of Mini teaching – Integration of Teaching Steps	4	2	1
IV METHODS OF TEACHING BIOLOGICAL SCIENCE	4.1 Teacher – centered method 4.2 Learner-centered Method 4.3 Small Group / whole class interactive teaching 4.4 Recent trends in teaching	4	2	2
V RESOURCES FOR TEACHING BIOLOGICAL SCIENCE	5.1 Print Resources 5.2 Audio Resources 5.3 Visual resources 5.4 ICT resources 5.5 community resources	6	1	2

## Unit Plan 2020-2022

### Pedagogy of English Part-I (Semester –I)

<b>Month</b>	<b>Content</b>	<b>Assignment</b>
July	Orientation & Basic English Communication Programme Yoga First aid classes, Life skills & Soft skills	Communication Skill practice Yoga demonstration
August	Unit-III Micro teaching ,Practice of a minimum of 2 skills under micro teaching( proper records to be maintained) Unit-I Objectives of teaching English Unit-II Lesson plan and unit planning, Practices to write lesson plan and practices macro teaching Tutorials.	Mini-Teaching practice and Lesson plan writing practice
September	Unit-IV Methods of teaching English , Making different teaching learning materials, Preparation of OHP –Slides-Film strips –Tutorials ,Observation and demonstration record classes, instructional material record practice.	Writing Model observation ,Demonstration Records writing and Preparing model TLMs
October	Teaching Practice	Records writing
November	Teaching Practice	Records writing
December	Unit-V Techniques of teaching English Planning and conducting any four practical classes in English, Practical work. Unit-VI Text book Preparation of unit test. Unit-VII curriculum in pedagogy of English	Class test
January	Unit-VIII Educational technology, Training in preparation of programmed learning.	
February	Unit-IX Curriculum in pedagogy of English	Class test
March	Revision exam	
April	Model Examination	Model Examination
May	Study holidays	
June	University Examination	

## Unit Plan 2020-2022

### Pedagogy of English Part-I (Semester –I)

<b>Months</b>	<b>Content</b>	<b>Assignment</b>
September	<b>Unit-I Aims and Objectives of teaching English</b> Need ,values and importance of teaching English Bloom’s taxonomy of teaching English	Class test
October	<b>Unit-2 Teaching skills</b> Micro teaching introduction, definition cycle and skills Set induction, explanation, stimulus variation, blackboard writing ...	Micro teaching skills teaching
November	<b>Unit-3 Approaches of teaching English</b> Herbatin,Marriuson model, unit plan,lesson plan teaching	Unit plan ,lesson plan writing
December	<b>Unit-4 Methods of teaching</b> ABL,ALM,AALM, Methods of teaching English	Differo methods of teaching English practice
January	<b>Unit-5 Instructional media</b> Tele conferencing , tele -communication, different medias	Practicing different media

# Year Plan 2020-2022

## Pedagogy of English Part-I

<b>Month</b>	<b>Content</b>	<b>Assignment</b>
July	Orientation & Basic English Communication Programme Yoga First aid classes, Life skills & Soft skills	Communication Skill practice Yoga demonstration
August	Unit-III Micro teaching, Practice of a minimum of 2 skills under micro teaching (proper records to be maintained) Unit-I Objectives of teaching English Unit-II Lesson plan and unit planning, Practices to write lesson plan and practices macro teaching Tutorials.	Mini-Teaching practice and Lesson plan writing practice
September	Unit-IV Methods of teaching English, Making different teaching learning materials, Preparation of OHP – Slides – Film strips – Tutorials, Observation and demonstration record classes, instructional material record practice.	Writing Model observation, Demonstration Records writing and Preparing model TLMs
October	Teaching Practice	Records writing
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December	Unit-V Techniques of teaching English Planning and conducting any four practical classes in English, Practical work. Unit-VI Text book Preparation of unit test. Unit-VII curriculum in pedagogy of English	Class test
January	Unit-VIII Educational technology, Training in preparation of programmed learning.	
February	Unit-IX Curriculum in pedagogy of English	Class test
March	Revision exam	
April	Model Examination	Model Examination
May	Study holidays	
June	University Examination	

# YEAR PLAN 2017-2018

## MATHEMATICS (Non-Semester)

MONTH	MATHEMATICS-1
<b>JULY</b>	Orientation & Basic English Communication Programme Yoga & First Classes, Life Skills.
<b>AUG</b>	Unit-III Microteaching, Miniteaching Practice of a minimum of 2 skills under microteaching(Proper records to be maintained) Unit-I Mathematics: Meaning, Nature and Scope- Aims and Objectives of teaching Mathematics in schools-Need and Significance of teaching Mathematics-Values of teaching mathematics.
<b>SEP</b>	Unit-II Planning for Instruction: Steps in planning a unit plan-Designing a lesson plan- Bloom's Taxonomy of education objectives-Formulating Instructional objectives at cognitive, affective and psychomotor levels.
<b>OCT</b>	Unit-II Structure of a four-fold lesson plan-Preparation of a model lesson plan- Types of test-items for formative evaluation in class. Unit-III Meaning of Teaching-Understanding major teaching skills; Introducing - explaining-questioning-varying the stimulus-non-verbal cues-reinforcement.
<b>NOV</b>	Unit-III closure and fluency in communication –Practicing a mini-lesson with multiple-teaching skills, Observation and feedback on the practice of integration of teaching skills-Understanding major steps in teaching a mini-lesson, Motivation-presentation-interaction-reflection and summing up-Observation and feedback on mini teaching.
<b>DEC</b>	Unit-IV Mathematics of Teaching Mathematics: Lecture method-Analytical and Synthetic Method-Deductive and Inductive Methods-Demonstration method-team teaching. Project Method-peer tutoring/teaching by students-Individual activities-experiential learning-Problem solving-group discussion –mixed-ability grouping-games & Puzzles.
<b>JAN</b>	Unit-IV Constructive Learning-Problem Based learning-Brain based learning- Collaborative learning-Flipped learning-Blended learning-e-learning trends-Video Conferencing. Unit-V Resources for Teaching Mathematics: Newspaper-Journals-Magazine-Mathematics encyclopedias, Radio talk-audio tapes-DVDs/CDs.Pictures-chart-poster-photographs-flash cards-models.

<b>FEB</b>	UNIT-IV ICT-Resources:Radio-TV-Internet-multimedia-interactive whiteboed.Community resources: Fieldtrip-Mathematics exhibition-Mathematics Laboratory-Mathematics Club-Qualities of a good mathematics textbooks- Qualities of a Mathematics teacher.
<b>MARCH</b>	Tour-Revision Exams.
<b>APRIL</b>	Model Exams
<b>MAY</b>	Model Practical Exam Study Holidays B.Ed Exam Commences
<b>JUNE</b>	B.Ed University Exams Practical Exams

# UNIT PLAN 2017-2018

## PEDAGOGY OF MATHEMATICS -1(Non-Semester)

UNITS	TOPICS	NO.OF HOURS		
		L	T	P
<b>I AIMS AND OBJECTIVES OF TEACHING MATHEMATICS</b>	1.1 Mathematics-meaning 1.2 Nature of Mathematics 1.3 Scope of Mathematics 1.4 Need and significance of teaching Mathematics 1.5 Values of teaching Mathematics			
<b>II PLANNING FOR INSTRUCTION</b>	2.1 Steps in planning a lesson-setting lesson goals 2.2 Designing a unit plan 2.3 Designing a lesson plan 2.3.1 Difference between Unit plan and Lesson plan 2.4 Bloom's Taxonomy of Educational objectives 2.5 Formulating instructional objectives of cognitive, affective and psychology levels 2.5.1 Writing Instructional Objectives for different Mathematics topics 2.6 Structure of a four fold lesson plan 2.7 Preparation of a model lesson plan 2.8 Types of Test items 2.9 Constructing test items for formative evaluation in class			
<b>III PRACTISING THE TEACHING SKILLS IN MATHEMATICS</b>	3.1 Meaning of teaching 3.2 Teaching Skills 3.2.1 Introducing 3.2.2 Explaing 3.2.3 Questioning 3.2.4 Varying the stimulus 3.2.5 Non verbal cues 3.2.6 Reinforcement 3.2.7. Closure 3.2.8 Fluency in communication 3.3. Model Micro Lessons 3.4. Practicing a Mini Lesson with Multiple Teaching Skills 3.5. Understanding Major steps in teaching a mini lesson 3.6. Observation and feedback on mini-teaching			

	<p>3.7. Model Mini Lesson Plan</p> <p>3.8. Practicing a mini-lesson-Integration of Teaching Skills</p> <p>3.9 .Observation and feedback on the practice of integration of teaching skills</p> <p>3.10. Observation and feedback on Practice of Mini teaching - Integration of Teaching Steps</p>			
<p><b>IV</b> <b>METHODS OF</b> <b>TEACHING</b> <b>MATHEMATICS</b></p>	<p>4.1. Teacher Centred Methods</p> <p>4.1.1. Lecture method</p> <p>4.1.2. Analytic and synthetic methods</p> <p>4.1.3. Deductive and Inductive methods</p> <p>4.1.4. Demonstration method</p> <p>4.1.5. Team teaching</p> <p>4.2. Learner centered methods</p> <p>4.2.1. Project method</p> <p>4.2.2. Peer tutoring</p> <p>4.2.3. Individual activities</p> <p>4.2.4. Experimental learning</p> <p>4.2.5. Teacher-guided learning</p> <p>4.2.6. Problem solving method</p> <p>4.3. Small group/ whole class interactive learning</p> <p>4.3.1. Student Seminar</p> <p>4.3.2. Group Discussion</p> <p>4.3.3. Mixed ability grouping</p> <p>4.3.4. Maths through games and puzzler</p> <p>4.4. Recent Trends</p> <p>4.4.1. Constructivist learning</p> <p>4.4.2. Problem based learning</p> <p>4.4.3. Brain based learning</p> <p>4.4.4. Collaborative learning</p> <p>4.4.5. Flipped Learning</p> <p>4.4.6 .Blended learning</p> <p>4.4.7. e-learning trends</p> <p>4.4.8 Video conferencing</p>			
<p><b>V</b> <b>RESOURCES</b> <b>FOR</b> <b>TEACHING</b> <b>MATHEMATICS</b></p>	<p>5.1. Print Resources</p> <p>5.1.1. Newspapers</p> <p>5.1.2. Journals</p> <p>5.1.3. Magazines</p> <p>5.1.4. Mathematics Encyclopaedias</p> <p>5.2. Audio Resources</p>			



	<ul style="list-style-type: none"> <li>5.2.1. Radio talk</li> <li>5.2.2. Audio tapes</li> <li>5.2.3. DVDs/CDs</li> <li>5.3. Visual resources <ul style="list-style-type: none"> <li>5.3.1. Pictures</li> <li>5.3.2. Charts</li> <li>5.3.3. Posters</li> <li>5.3.4. Photographs</li> <li>5.3.5. Flash cards</li> <li>5.3.6. Models</li> </ul> </li> <li>5.4. ICT Resources <ul style="list-style-type: none"> <li>5.4.1. Radio</li> <li>5.4.2. TV</li> <li>5.4.3. Internet</li> <li>5.4.4. Multimedia</li> <li>5.4.5. Interactive white board</li> </ul> </li> <li>5.5. Communitive resources <ul style="list-style-type: none"> <li>5.5.1. Field trips</li> <li>5.5.2. Mathematics exhibition</li> <li>5.5.3. Mathematics Laboratory</li> <li>5.5.4. Mathematics Club</li> <li>5.5.5. Qualities of a good mathematics text book</li> <li>5.5.6. Qualities of a mathematics teacher</li> </ul> </li> </ul>			
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# YEAR PLAN 2021-2022

## MATHEMATICS (Semester)

MONTH	MATHEMATICS-1
<b>JULY</b>	Orientation & Basic English Communication Programme Yoga & First Classes, Life Skills.
<b>AUG</b>	Unit-II Microteaching: Concepts, Definition, steps, Cycle, Micro-teaching, Micro teaching Practice of a minimum of 2 skills under microteaching (Proper records to be maintained) Unit-I Mathematics: Meaning, Nature and Scope, Need and Significance, Values, Aims and Objectives. Instructional Objectives and Behavioral Objectives-Need and Importance of Instructional Objectives.
<b>SEP</b>	Unit-I Bloom's Taxonomy of Instructional Objectives - cognitive, affective and psychomotor Domains. Revised Bloom's Taxonomy 2001 Interrelation among the domains-Correlation between subjects.
<b>OCT</b>	Unit-II Teaching skills :Skill of Set induction, Skill of Explaining, Probing Skills, Skill of Blackboard Usage, questioning-varying the stimulus-non-verbal cues-reinforcement, skill of closure-link lesson-Model episode.
<b>NOV</b>	Unit-III Approaches of Teaching: Approaches of Lesson Planning-Steps-Organizing Teaching: Memory level (Herbartian Model), Understanding level (Morrison teaching Model), Reflective Level (Bigge and Hunt Teaching Model)-Unit Plan-Lesson Plan Writing.
<b>DEC</b>	Unit-IV Methods of Teaching: Teacher Centered Instruction: Lecture method - Demonstration method-team teaching. Learner Centered-Self Learning-Forms of Self-learning).
<b>JAN</b>	Unit-IV. Programmed Instruction, Computer Assisted Instruction, Keller Plan, Project Plan, Activity Based learning (ABL)-Mind Map, Advanced Active Learning Method (AALM).
<b>FEB</b>	UNIT-Classification of Instruction Media-Use of mass media in Classroom instruction. New Emerging Media: Teleconference, Communication Satellites, Computer Networking, Word Processors, Blended Learning, Flipped Classroom, Artificial Intelligence, Augmented Reality.
<b>MARCH</b>	Tour-Revision Exams.
<b>APRIL</b>	Model Exams

<b>MAY</b>	Model Practical Exam Study Holidays B.Ed Exam Commences
<b>JUNE</b>	B.Ed University Exams Practical Exams

# UNIT PLAN 2021-2022

## PEDAGOGY OF MATHEMATICS -1(Semester)

UNITS	TOPICS	NO.OF HOURS		
		L	T	P
<b>I AIMS AND OBJECTIVES OF TEACHING MATHEMATICS</b>	1.1 Mathematics-meaning 1.2 Nature of Mathematics 1.3 Scope of Mathematics 1.4 Need and significance of teaching Mathematics 1.5 Values of teaching Mathematics 1.6 Aims And Objectives of Teaching Mathematic 1.6.1. Aims and Objectives of Teaching Mathematics in Schools 1.6.2. Difference between Aims and Objectives  1.7 Instructional objectives and Behavioural objectives 1.7.1. Writing Instructional objectives in terms of Behavioral objectives 1.8 Blooms Taxonomy of Instructional Objectives 1.8.1. Cognitive Domain 1.8.2. Affective Domain 1.8.3. Psychomotor Domain 1.9 Revised Bloom's Taxonomy 1.10 Writing Instructional Objectives for different Mathematics Topics 1.11 Inter-relation among the domains 1.12 Correlation between Mathematics and other subjects			
<b>II TEACHING SKILLS</b>	2.1 Micro Teaching 2.1.1. Micro Teaching -Definition 2.1.2. Need and Importance of Micro-teaching 2.1.3. Characteristics of Micro teaching 2.1.4. Micro Teaching cycle 2.1.5. Uses of Micro Teaching 2.1.6. Microteaching Vs Microteaching 2.2 Identification of teaching skills A 3.2.1. Skill of Set induction 3.2.2. Skill of Explaining 3.2.3. Skill of Black Board usage 3.2.4. Skill of questioning 3.2.5. Skill of probing 3.2.6. Skill of Stimulus variation			

	<p>3.2.7. Skill of Reinforcement</p> <p>3.2.8. Skill of Non-verbal cues</p> <p>s 3.2.9. Skill of closure</p> <p>3.2.10. Advantages of micro teaching</p> <p>2.3 Model Micro Lessons</p> <p>2.4 Link Lesson</p>			
<b>III APPROCHES OF TEACHING</b>	<p>3.1 Steps in Planning a lesson</p> <p>3.2 Designing a Lesson Plan</p> <p>    3.2.1 Herbart in Steps</p> <p>    3.2.2 Preparation of Lesson Plan</p> <p>3.3 Organizing Teaching</p> <p>    3.3.1 Memory level of teaching</p> <p>    3.3.2 Understanding level of teaching</p> <p>    3.3.3 Reflective Level of Teaching</p> <p>3.4 Designing a Unit plan</p> <p>    3.4.1 Difference between Lesson plan and unit plan</p> <p>3.5. Structure of a four-fold lesson</p> <p>3.6. Preparation of a model lesson plan</p>			
<b>IV METHODS OF TEACHING MATHEMATICS</b>	<p>4.1. Teacher Centered Methods</p> <p>4.1.1. Lecture method</p> <p>4.1.2. Demonstration method</p> <p>4.1.3. Team teaching</p> <p>4.2. Learner centered methods</p> <p>4.2.1. Self-learning</p> <p>4.2.2. Programmed Instruction</p> <p>4.2.3. Computer Assisted Instruction</p> <p>4.2.4 .Killer Plan</p> <p>4.2.5. Project Method</p> <p>4.2.6. Activity Based learning</p> <p>4.2.7. Activity Learning method</p> <p>4.2.8. Mind Map</p> <p>4.2.9. Advanced Active Learning Method</p>			
<b>V INSTRUCTIONAL MEDIA</b>	<p>5.1. Use of Mass media for classroom instruction.</p> <p>5.2. New Emerging Media</p> <p>5.2.1. Tele-conferencing</p> <p>5.2.2. Communication Satellite</p> <p>5.2.3. Computer Networking</p> <p>5.2.4. World Processors</p> <p>5.2.5. Blended Learning</p> <p>5.2.6. Flipped Classroom</p> <p>5.2.7. Artificial Intelligence</p> <p>5.3.8. Augmented Real</p>			